



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,735	08/19/2003	Teruaki Uehara	OKI.565	3778
20987 7590 02/13/2008 VOLENTINE & WHITT PLLC ONE FREEDOM SQUARE 11951 FREEDOM DRIVE SUITE 1260 RESTON, VA 20190			EXAMINER NGO, CHUONG D	
			ART UNIT 2193	PAPER NUMBER
			MAIL DATE 02/13/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/642,735

Applicant(s)

UEHARA, TERUAKI

Examiner

Chuong D. Ngo

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1,3-6 and 21-25 are directed under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1,3-6 and 21-25 are directed to apparatus for merely performing manipulations and calculations of data values. In order for such a claimed invention that merely performs calculations and manipulations of data to be statutory, the claimed invention must accomplish a practical application, and is not directed to a preemption of a calculation and/or manipulation data. That is the claimed invention must transform an article or physical object to a different state or thing, or produce a useful, concrete and tangible result and not cover every substantial practical application. See State Street 47 USPQ2d, Benson 175 USPQ, and "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility", OG Notices: 22 November 2005.. It is clear from claims 1,3-6 and 21-25 that the claims merely involve calculations and manipulations of data. The claimed invention does not transform an article or physical object to a different state or thing. The inputs are numerical values and the output is also a numerical value. The result produced by the inventions do not have a real world value but merely numerical values without a practical application recited in the claims to make the result useful, concrete and tangible. Therefore, claims 1,3-6 and 21-25 are directed to non-statutory subject matter as the claimed invention fails to accomplish a practical application. Further, since the claims appear to cover every substantial practical application, they are also directed to a preemption of the claimed manipulation and calculation of data.

Art Unit: 2193

2. Claims 21 and 23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Getzlaff et al (5,754,875).

Getzlaff et al discloses in figure 2 an arithmetic unit including a memory (250) having a plurality blocks (252,253) for storing data, an arithmetic logic unit (10), a register (14,15) for temporarily storing data read from the memory, and a combining circuit (the node after ALU) for replacing a part (either 282 or 283) of the data from the register with the output (17) from the arithmetic logic and generating output data (285) as claimed.

3. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Getzlaff et al (5,754,875).

It is noted that Getzlaff et al does not specifically teach the arithmetic unit including a shifter and an accumulator as claimed. However, including elements in an arithmetic unit are so well known in the art. A person of ordinary skill in the art would have found it obvious to do so in order to increase flexibility of the arithmetic unit in performing difference functions and to maintain logic level of the output signal, respectively.

4. Applicant's arguments filed 11/28/2007 have been fully considered but they are not persuasive.

Regarding the rejection under 35 USC 101, applicant correctly asserted that the first step in determining whether a claim is directed to statutory subject matter under 35 U.S.C. 101 is to identify whether the claim falls within one of the four enumerated categories of patentable subject matter recited in section 101 (process, machine, manufacture or composition of matter).

Art Unit: 2193

However, when the claim fall within, rather than does not fall within as applicant asserted, one of the four enumerated categories of patentable subject matter, the analysis then proceeds to the steps of considering Judicial Exceptions, Practical Application, and Preemption. Thus, the claims are properly rejected under 35 USC 101 as set for in the rejection above.

Regarding the rejections under 35 USC 102(b) and 103(a), it is respectfully submitted that in the rejection the combined of elements 282 and 283 is viewed a the claimed register, and ORA and OAB are parts of the data temporality stored in the register. Thus, combining the resultant data word outputted by the ALU (10) with the data word from ORA is to replace the part ORB of the data from the register (282,283) with the output (17) from the arithmetic logic and generating output data (285), or combining the resultant data word outputted by the ALU (10) with the data word from ORB is to replace the part ORA of the data from the register with the output (17) from the arithmetic logic and generating output data (285) as claimed.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2193

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

02/12/2008

/Chuong D Ngo/
Primary Examiner, Art Unit 2193